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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,219	06/02/2006	Karlheinz Ulrich Gerhard Hahn	102792-566 (11409/P4 US)	6938
27380 7590 12/05/2008 NORRIS, MCLAUGHLIN & MARCUS 875 THIRD AVE 18TH FLOOR NEW YORK, NY 10022			EXAMINER ANTHONY, JOSEPH DAVID	
			ART UNIT	PAPER NUMBER
			1796	
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			12/05/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/575,219

**Applicant(s)**

HAHN ET AL.

**Examiner**

Joseph D. Anthony

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/24/08 as an RCE and an amendment.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3 and 5-20 is/are pending in the application.
- 4a) Of the above claim(s) 18 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-17 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION AFTER FILING OF RCE**

***Priority***

Receipt is acknowledged of papers filed on 4/10/06 purporting to comply with the requirements of 35 U.S.C. 119(a)-(d) and they have been placed of record in the file. Attention is directed to the fact that the date for which foreign priority is claimed is not the date of the first two filed foreign applications acknowledged in the oath or declaration. After a through review of all three filed foreign applications it has been determined, by the Examiner, that only that last of the three filed foreign applications namely United Kingdom 0404470.7 filed 03/01/2004, contains sufficient disclosure to enable the presently claimed invention. It is clear that the first two filed foreign applications do not enable the presently claimed invention for a number of reasons such as for the concentration ranges of the various claimed components. *As such, the effective foreign priority date of applicant's pending claims is deemed to be 03/01/2004.*

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one

Art Unit: 1796

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 20 is deemed to contain new matter in regards to the  $P_2O_5$  concentration of the soluble glass is between 45-75 mol.%. The Examiner notes applicant made no attempt to show where in the originally filed description there is support for the specific lower end point of 45 mol. %. Furthermore, the Examiner is unable to find any support for the specific lower end point of 45 mol. %. It seems to the Examiner, that applicant improperly added new claim 20 only in an attempt to overcome the applied Kasuga et al. U.S. Patent Application Publication No.2004/0138043A1, which teaches an optical glass having a concentration of  $P_2O_5$  of 25 to 44 mol %.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5-7, 13-14 and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Izuki U.S. Patent Application Publication No. 2003/0220182A1.

Izuki teaches optical glass and optical element made of the optical glass. The optical glass consists essentially, expressed in term of weight percent, of:

P.sub.2O.sub.5: 20.0 to 30.0%, B.sub.2O.sub.3: 0.5 to 10.0%, Nb.sub.2O.sub.5: 5.0 to 50.0%, WO.sub.3: 15.0 to 27.0%, Bi.sub.2O.sub.3: 0.1 to 3.0%, ZnO: 1.0 to 7.0%, Li.sub.2O: 0 to 8.0%, Na.sub.2O: 0 to 15.0%, K.sub.2O: 0 to 15.0%, and Li.sub.2O+Na.sub.2O+K.sub.2O: 5.0 to 20.0%. See abstract, section [0011], section

[0035], examples and claims. Applicant's claims are deemed to be anticipated over the examples, such as example 3. Also see comparison example 4.

Claims 8-10 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Izuki U.S. Patent Application Publication No. 2003/0220182A1.

Izuki has been described above and is deemed to anticipate applicant's claimed invention because the further addition of applicant's claimed refining is deemed to be at once envisaged by one having ordinary skill in the art in light of the disclosure of the reference, such as section 0011]. In the alternative, Izuki can be said to differ from applicant's claimed invention in that there is no direct teaching (i.e. by way of a specific example) to a composition that actually comprises applicant's claimed refining agent. It would have been obvious to one having ordinary skill in the art to use Izuki's disclosure of section [0011] as strong motivation to actually add such metal oxides as refining agents to applicant's claimed invention.

Claims 1, 3, 5, 7-14 and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogino et al. U.S. Patent Application Publication No. 2004/0018933A1. Ogino et al. teach optical glass. The optical glass comprises, in mass percent, 15-35% of P.sub.2O.sub.5, 40-60% of Nb.sub.2O.sub.5, 0.5% to less than 15% of Na.sub.2O and 3% to less than 25% of BaO, has a ratio in mass % of (BaO+Nb.sub.2O.sub.5)/{(Ti-O.sub.2+WO.sub.3).times.3+Bi.sub.2O.sub.3+Nb.sub.2O.sub.5}>1.0; is free of Pb and

As; and has a refractive index (nd) within a range from 1.78 to 1.90 and an Abbe number (.nu.d) within a range from 18 to 27. See abstract, sections [0019]-[0028], examples and claims. Applicant's claims are deemed to be anticipated over the examples, such as example 46.

Claim 15 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ogino et al. U.S. Patent Application Publication No. 2004/0018933A1.

Ogino et al. has been described above and is deemed to anticipate applicant's claimed invention because applicant's specifically claimed concentration ranges are directly disclosed by the reference. In the alternative, Ogino et al. can be said to differ from applicant's claimed invention in that there is not a direct teaching (i.e. by way of a specific example) to a composition that actually has applicant's claimed components within the claimed concentration ranges. It would have been obvious to one having ordinary skill in the art to use the broadly disclosed concentration ranges of Ogino et al., see sections [0019]-[0021], as strong motivation to use concentration amounts that fall within applicant's claimed concentration ranges.

Claims 1, 3, 5, 13-14 and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Kasuga et al. U.S. Patent Application Publication No.2004/0138043A1.

Kasuga et al. teaches optical glass, perform for press molding and optical element. An optical glass being free of lead and fluorine, having a low glass transition

Art Unit: 1796

temperature permitting press-molding with a mold formed of stainless steel and having high climate resistance includes an optical glass comprising, by mol %, 25 to 44% of P.sub.2O.sub.5, 10 to 40% of a total of Li.sub.2O, Na.sub.2O and K.sub.2O, 5 to 40% of ZnO, 1 to 35% of BaO and at least one components selected from Nb.sub.2O.sub.5, Bi.sub.2O.sub.3 and WO.sub.3, having a glass transition temperature (T<sub>g</sub>) of 370.degree. C. or lower and being free of lead and fluorine and an optical glass which is free of lead and fluorine, has a mass loss ratio of less than 0.25% when immersed in pure water, and has a glass transition temperature (T<sub>g</sub>) of 370.degree. C. or lower. See abstract, examples in Tables 1-6 and claims. Applicant's claims are deemed to be anticipated over the examples in Tables 1-6.

Claims 6-7, 8-10, 15 and 20 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kasuga et al. U.S. Patent Application Publication No.2004/0138043A1.

Kasuga et al. has been described above and is deemed to anticipate applicant's claimed invention since the addition of applicant's claimed refining agents and applicant's claimed concentration ranges are deemed to be at once envisaged. In the alternative, Kasuga et al differ from applicant's claimed invention in that there is no direct teaching (i.e. by way of specific examples) to compositions that comprise applicant's claimed refining agents and applicant's claimed concentrations ranges. It would have been obvious to one having ordinary skill in the art to use Kasuga et al.'s disclosure of section [0070] as strong motivation to actually add such metal oxides as

Art Unit: 1796

refining agents to applicant's claimed invention. It would have been obvious to one having ordinary skill in the art to use the broadly disclosed concentration ranges of Kasuga et al., see sections [0013]-[0017], as strong motivation to use concentration amounts that fall within applicant's claimed concentration ranges. In regards to applicant's claim 20, applicant's lower claimed concentration starting point of 45 mole % of  $P_2O_5$ , is deemed to be so close to Kasuga et al's upper mole % of 44 mole % of  $P_2O_5$ , as to render applicant's claim 20 as being at least obvious over Kasuga et al., outside a showing of unexpected and superior results.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thornton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3, 5-14, and 16-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-8, 10 and 12-14 of copending Application No. 10/468,669. Although the conflicting claims are not identical, they are not patentably distinct from each other because there is massive overlap in the claimed subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3, 5-9, 13-17 and 20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-7, 9-10, 13 and 18-23 of copending Application No. 10/575,201. Although the conflicting claims are not identical, they are not patentably distinct from each other because the pending claims are deemed to be a particular subset of the claims in said copending application. Also see the Table on page 12 of the specification of said copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3, 5-9, 13-17 and 20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-7, 9-10, 12-13 and 18-23 of copending Application No. 10/558,211. Although the conflicting claims are not identical, they are not patentably distinct from each other

because the pending claims are deemed to be a particular subset of the claims in said copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments filed 11/24/08 with the RCE and Amendment have been fully considered but are not persuasive to put the application in condition for allowance for the reasons set forth above. Additional examiner's comments are set forth next.

After reading applicant's remarks, it is clear to the Examiner that applicant is misreading the actual scope of applicant's newly amended independent claim 1. The composition, as a whole, of applicant's independent claim 1, is NOT limited to the recited concentration ranges of the water soluble glass composition. The reasons for this is that the water soluble glass composition is only a component of the larger claimed composition. As such, the water soluble glass composition could be only 0.01% by weight of the entire claimed composition. This is another reason why the Examiner is maintaining his position that it is clear that the first two filed foreign applications do not enable the presently claimed invention for a number of reasons such as for the concentration ranges of the various claimed components. *As such, the effective foreign priority date of applicant's pending claims is deemed to be 03/01/2004.*

Applicant argues that applicant's amendment to independent claim 1, overcomes the applied prior-art rejections made over Izuka and Ogino et al. because the

Art Unit: 1796

amendment limits the concentration range of the alkali metal oxide component to over 20 to 50 mole%. The Examiner wholly disagrees with applicant's conclusion for a number of reasons such as:

1) The actual concentration range of the alkali metal oxide component in applicant's claimed composition can be far lower than 20 to 50 mole% when the concentration of the water soluble glass composition component of the composition as a whole is less than 100% by weight., and

2) Applicant has clearly misread the concentration units disclosed by the applied Izuka and Ogino et al. references. Both Izuka and Ogino et al. disclose their concentration ranges in units of weight % **NOT** in units of mole % as is claimed in applicant's claims! The Examiner has performed the laborious work of converting the weight % of certain Examples of the applied Izuka and Ogino et al. references, into applicant's claimed mole % and has thus proved that Izuka and Ogino et al. both contain specific concrete examples that teach concentrations of alkali metal oxide(s) in mole % that fall directly within applicant's claimed range of over 20 to 50 mole%. As an example, in Izuka's Example 3, the number of moles of  $\text{Li}_2\text{O}$  is calculated to be 0.167 and the number of moles of  $\text{Na}_2\text{O}$  is calculated to be 0.081 moles. The total number of moles of  $\text{Li}_2\text{O}$  and  $\text{Na}_2\text{O}$  is thus 0.248 moles. When 0.248 moles is divided by 0.722 moles (which is the total calculated moles of the entire composition of Example 3), the mole % of  $\text{Li}_2\text{O}$  and  $\text{Na}_2\text{O}$  is calculated to be **34.35 mole %**. Likewise, in Ogino et al.'s Example 46, the number of moles of  $\text{Na}_2\text{O}$  is calculated to be 0.145 moles. When 0.145 moles is divided by 0.615 moles (which is the total calculated moles of the entire

composition of Example 46), the mole % of  $\text{Na}_2\text{O}$  is calculated to be **23.58 mole %**. The Examiner also calculated the mole % of  $\text{P}_2\text{O}_5$  in each of said Examples, and found that the calculated  $\text{P}_2\text{O}_5$  mole % also falls directly within applicant's claimed concentration range of 10 to 75 mole % of  $\text{P}_2\text{O}_5$ .

3) Finally, applicant's argument over the applied Kasuga et al. reference where really nothing more than asserting that Kasuga et al. glass compositions are not the same as applicant's claimed composition. The examiner must disagree for the reasons set forth above. Also notice that Kasuga et al. directly teaches in their examples, as set forth in Tables 1-6, mole % of alkali metal oxides that fall directly within applicant's claimed mole % of alkali metal oxide of over 20 to 50 mole%.

The following comments were made by the Examiner in the previous Final rejection and are repeated here because they are still deemed to be highly relevant to the pending claims. *Applicant's arguments filed 4/14/08 have been fully considered but are not persuasive to put the application in condition for allowance for the reasons set forth above. Additional examiner's comments are set forth next. Applicant's elected invention is: "A zinc and bismuth containing, water-soluble **glass composition comprising:**" [emphasis added]. Applicants set forth arguments that one skilled in the art would not look to the applied prior-art references of Izuka, Ogino et al. and Kasuga et al., which teach optical glass compositions, for pertinent information on applicants' glass compositions since applicants intend to use their glass compositions in a dishwashing cycle of glassware. The Examiner must strongly disagree. Applicants' arguments would have had relevance if applicants had elected claims 18-19, drawn to a method of*

*inhibiting the corrosion of glassware in an automatic dishwashing machine, but unfortunately applicants instead elected the claims drawn to a glass composition (i.e. claims 1, and 3-17). Since applicants are claiming a glass composition, one having ordinary skill in the art would search places where glass compositions would be found. It is thus irrelevant what the intended use of such glass compositions are, as long as the glass compositions taught in the prior-art either anticipate or render obvious the glass compositions being claimed by applicants. It is clear that the optical glass compositions taught and suggested by Izuka, Ogino et al. and Kasuga et al. do indeed meet said burden. The Examiner holds that if the optical glass compositions taught and suggested by Izuka, Ogino et al. and Kasuga et al. were used during a dishwashing cycle for glassware, zinc and bismuth would be released within applicant's claimed range and such would inherently ensure glassware corrosion protection. Why does the Examiner make said assertion? Because it is axiomatic that the properties of a compound/composition, both chemical and physical, are inherent to the compound/composition itself. As such, since the optical glass compositions, as taught and suggested by Izuka, Ogino et al. and Kasuga et al., are composed of the same components as those claimed by applicants' glass compositions, and said components fall within applicants' claimed concentration ranges, the optical glass must inherently possess applicants' claimed properties. Due to the above, it is now applicant's responsibility, if they want any allowable subject matter, to prove that the glass compositions of the applied references do not in fact possess the characteristics recited in applicant's claims. Applicant is reminded that the courts have constantly declared*

Art Unit: 1796

*that a novel intended use does not impart patentability on an otherwise old or obvious invention, see In re Tuominen, 213 USPQ 89 (CCPA 1982), In re Pearson, 181 USPQ 641 (CCPA 1974), and In re Spada, 15 USPQ 2d 1655 (CAFC 1990).*

*Finally, applicants' request that the Examiner hold the Provisional Obvious Double Patenting rejection in abeyance until patentable subject matter is indicated is noted, but since Obvious Double Patenting rejections are real rejections over applicants' claims, said claims can never be indicated as allowable as long as the Obvious Double Patenting rejection remain in effect.*

#### **Examiner Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (571) 272-1117. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The centralized FAX machine number is (571) 273-8300. All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner.

/Joseph D. Anthony/  
Primary Examiner, Art Unit 1796  
12/3/08